

Institutional Factors Supporting or Impeding the Process of the Finnish National Forest Programme

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Version 10.6.2002

Abstract

The paper evaluates the institutional factors that have supported or impeded the preparation and implementation of the national forest programme in Finland. The institutional changes discussed cover mainly the institutions of collective choice level within the time span from the Rio Declaration in 1992 to the present. The Environmental Programme for Forestry, accepted in 1994, can be seen as a basic document of Finnish forest policy towards sustainable forest management. Its preparation paved the way for the new, broad-based participation and inter-sectoral co-ordination. The Governmental commitment to the preparation and implementation of the national forest programme has been a strong supporting factor. The close link between the national and regional forest programmes has strengthened the commitment of provincial actors to the national forest programme. The long corporatist tradition in forest policy planning, strong and closed network of forest stakeholders and an inadequate conflict resolution scheme have been significant impediments.

Keywords: Decentralisation, Forest policy, Conflict resolution, Institutionalism, Inter-sectoral co-ordination, Neo-corporatism, Participation

1 Introduction

There has been a comprehensive need to transfer Finnish forest policy and forestry practices from the mode of progressive timber management to that of sustainable forest management since the Rio Declaration in 1992. Ecological, social and cultural aspects should be included into forest policy objectives. The sequence of actions was initiated by the Environmental Programme for Forestry (1994) and continued by the reform of legislation for forestry and nature conservation in 1996. The Government initiated the preparation of a national forest programme in 1997. The programme, Finland's National Forest Programme 2010, was accepted early in 1999. The intermediate period, from the Rio Declaration to the initial of national forest program process, is an inseparable part of the forest policy transfer to sustainable forest management in Finland. The programme can be seen as a specific part of this transition.

The aim of the paper is to evaluate the institutional aspects related to nfp-process in Finland. Institutional factors are mostly country-specific in their support or impediment of the process of achieving a national forest programme. The evaluation is limited to institutional changes, i.e. the unchanged institutions, even those at the constitutional level, are excluded. The institutional changes are discussed with respect to the core elements of a national forest programme, i.e.

participation, inter-sectoral co-ordination, conflict resolution, decentralisation and delegation. Substantive national forest programmes imply that high level of activity is achieved on each of these elements. The core elements were adopted in the Rio Declaration and further developed in IPF/IFF-processes and in the COST Action E19 (e.g. Hogl and Pregernig 2000). The Rio Declaration was the external shock that pushed Finnish forest policy towards sustainable forest management and activated the process of a national forest programme.¹ The latter makes it necessary to start the identification of the institutional aspects from the Rio conference in 1992.

2 Concept of institutional factors

It is difficult to define what is meant by "institutional factors" because of ambiguous meaning of "institution". According to an institutional economist John Commons (1931), "if we endeavour to find a universal circumstance, common to all behaviour known as institutional, we may define an institution as collective action in control, liberation and expansion of individual action". Institutions in his specification cover unorganised customs up to the organised management of social life, such as the family, the corporation, the trade association, the trade union, the reserve system, and the state. A feature common to all of them is control: ways to arrange individual actions as parts of collective action (Commons 1931). Aoki (2001) specifies institutions to cover shared beliefs, endogenous rules of the game, and summary equilibrium representations of the policy processes.

Institutions can be formal or informal. Norms (laws, acts and other statements formulating sanctions) and economic policy incentives are typical examples of formal normative institutions (Samuels 1988, Hagenstein 1989). Norms typically define sanctioned economic actions whereas public payments and subsidies are intended to encourage agents' preference for one pattern of economic behaviour over another. A specific set among these norms is that which defines constitutional rights and obligations. Informal institutions arise from spontaneous interactions that together with the formal institutions, define the conditions for the interactions of the actors in the policy arena (North 1990).

The disciplines of neoclassical economics restrict their interest to economic transactions, market structures, prices and income distribution. In the research tradition of economics called rational choice, institutions are discussed as the actions for solving the allocation problems related to externalities or public goods. Institutions are understood to be the necessary background conditions for managing the rationality of economic transactions. On the other hand, rational choice institutionalism also sees institutions as providing the context within which individual decisions are set, but places emphasis on individual rather than context (Aspinwall and Schneider 2000;4). North (1981;12), however, states that "something more than an individualistic calculus of cost/benefit is needed in order to account for change and stability".

The set of relevant institutions can be identified at three levels (Ostrom 1999). The institutions at the constitutional level are the arrangements that determine the basic rules of society, as well as property rights. Institutions at the collective choice level regulate decision-making and are modified with time in response to

social progress and changes in power relationships among the actors of the policy arena. The operational institutions at the operational level are subordinated to these previous levels. These institutions transmit the conventions and rules of economic and social transactions as institutions.

In this paper, institutional changes are related to their historical background, i.e. they are analysed as path dependent. Path dependence is important when considering institutional changes related to natural resources. According to Berge and Saastamoinen (2002) "radical proposals for changes of the institutional structure will meet powerful opposition from those who are best at exploiting the resources within the old institutional structure". The identification of the relevant power elite is prerequisite for understanding institutional changes. The power elite – and the forestry elite is not an exception – has a clear incentive to maintain their power. Their, often hidden, incentives in the formation of institutions and institutional arrangements is not necessarily the promotion of efficiency, but rather maintaining the existing power and distributional relationships. The crucial challenge preceding institutional changes is the identification of the set of solutions acceptable to the relevant power elite and the organisations they represent. Institutional changes formulate the choice set over time. They lead to dynamic changes in society, and transfer in turn the choice set available to the power elite in the next phase. The latter, that is called path dependence, and social networks in the policy arena relate to the discussion concerning the research traditions of historical/sociological institutionalism (see Aspinwall and Schneider 2000).

Our discussion on institutional changes focuses on the norms and rules, both formal and informal, created due to their occasional abrupt changes. The research effort relates to the specific institutional changes required to adjust the policy objective to meet the objectives of economic, ecological and social sustainability of forestry. Institutions provide an environment for political struggles, and the set of rules for these struggles are formulated in the policy arena. The actors of the policy arena are restricted by the targets of their organisations and by the processes of institutional changes conditioned by the accumulation of prior procedures, rules and norms of management.

Institutional changes are analysed in this paper as the outcomes from the power coalitions and single actions of the key organisations involved in forest policy. The paper focuses on committees, work groups and other activities and arrangements to redistribute power. The majority of relevant institutional changes in this context are on the collective choice level. We do not restrict our analyses only to the rational choices of the individual actors but discuss also the path dependence and external shocks in our evaluation.

3 Institutional changes in forest sector

3.1 Key actors in the forest policy arena in Finland

The identification of the key stakeholders and the major changes of their standing in the forest policy arena is important in order to understand the game of forest policy formulation in Finland. During the period of progressive timber

management targets, the neo-corporatist network of forest stakeholders dominated forest policy actions. Their common interests were related to the institutions promoting timber production and the use of commercial timber resources. Stable structure and power relations among the stakeholders were typical characteristics of this policy network. The stakeholders in the network can be divided into state authorities, semi-public organisations, non-governmental organisations (NGOs) and research society.

The Ministry of Agriculture and Forestry has played a central role in the field of forest administration and policy. Forestry affairs are delegated to a forestry department that is relatively independent of agricultural affairs. Since the 1960's, the Ministry of Finance's role in economic policy increased through the long run macroeconomic planning of economic policy. As a part of that planning, public subsidies for forestry investments were justified up to the early 1990s, making the Ministry of Finance an important actor in forest policy (Ollonqvist 1998). The Ministry of the Environment has become an *ex officio* member of the forest policy arena after its establishment in 1983 when the administration of conservation forests was transferred to it from the Ministry of Agriculture and Forestry. The sphere of the policy stakeholders among public authorities was further expanded early in the 1990s when representatives from the Ministry of Trade and Industry and the Ministry of Labour were invited to participate in forest policy planning committees. However, the inter-sectoral coordination was mainly of symbolic value at that time.

The Forest and Park Service, which is in the administrative domain of both the Ministry of Agriculture and Forestry and the Ministry of the Environment, manages state-owned commercial forests and conservation areas. Under the control of these two powers, it has had to learn a dialogue in order to reconcile conflicting demands concerning the management of the state forests. Since the mid-1990s, the Service has also pioneered the development and adoption of the principle of public participation in its forest planning activities (Loikkanen et al 1999, Wallenius 2001). The Forest and Park Service's role in forest policy implementation decreased at the beginning of the 1990s when the four-level public forest administration was replaced by a two-level structure. Previously it was also the central public authority for private forests.

The thirteen regional Forest Centres, responsible to the Ministry of Agriculture and Forestry, constitute a part of the official organisation promoting non-industrial private forestry and enforcing the Forest Act concerning all forest owners, private and public. The semi-public status of organisation and strong autonomy characterize the Forestry Centres, and forest owners have large a representation on their boards. Due to the organisational reform of the forest administration in the 1990s, the significance of the Forest Centres has increased in the forest policy arena thereby strengthening provincial aspects in national forest policy. Previously, the Forestry Development Centre Tapio, administratively located between the Ministry of Agriculture and Forestry and the Forestry Centres, was a crucial player in forest policy arena, but its role has weakened since organisational reform.

The principal neo-corporatist players in forest policy arena have been Central Union of Agricultural Producers and Forest Owners (MTK), which represents

non-industrial private forest owners, and the Finnish Forest Industries Federation. They were dominant in all the committees and work groups concerning forest policy up to the beginning of 1990s. Their forest policy influence was greatest during the period 1960–91. At that time they were the major partners of the delegation that contracted stumpage price agreements (Ollonqvist 1998). The Finnish Forest Association has been the mediator between the forestry and the rest of society. The Association, established in 1877, is a co-operation organization for the forestry field.² Since 1996 it has managed a top-level discussion forum for decision-makers in order to increase their knowledge and responsiveness on forest issues.

The neo-corporatist forest policy network grew gradually at the same time as the neo-corporatist structures expanded in the planning of macroeconomic policy (Ollonqvist 1998). The inclusion of stakeholders from outside the forest policy community based on invitation. The unions of forest sector employees (The Wood and Allied Workers' Union, the Union of Paper Workers) and employers (The Trade Association of Finnish Forestry and Earth Moving Contractors) became involved in the policy arena during the 1970s and environmental NGOs at the beginning of the 1990s. The Finnish Association for Nature Conservation, the oldest conservation organisation, with its dogmatist youth organisation, the Finnish Nature League, together with WWF Finland and Greenpeace have been the main participants of ENGOs. The status of Greenpeace, however, has diminished since the end of 1990s.³

Forest researches, working mainly in the Finnish Forest Research Institute (METLA) but also in the University of Helsinki, had become key actors in forest policy planning during the period of progressive timber management. A core group of forest scientists played a leading role in the formation of the social capacity for forest policy planning and they were a fundamental part of the national forest elite (Metz 1993, Ollonqvist 1998). In the 1990s, the forest research society has been partially relegated to the background, in spite of some pathbreaking proposals to renew forest policy (Palo 1993). Forest researchers' task is now to provide specific scientific expertise.

3.2 Market allocation as a substitute for institutional control and rationing

Non-industrial private forests are of crucial importance to Finnish forestry. They account for 61 per cent of the total forest land, but private forest owners supplied 70–85 per cent of the domestic commercial roundwood purchased by forest industry during the period 1980–2000. The preservation of strong agrarian forest ownership was also seen as an important factor for the vitality of the rural areas. These features gave rise to a need for institutions that controlled and rationed the market of forested land and timber. These institutional controls gradually weakened in the early 1990s, partly due to the preconditions for the EU membership.

The Land Acquisition Right Act (1978) and other farm legislation restricted the rights of persons other than farmers to buy land. The restrictions on the free market of forest land were abolished by gradually withdrawing the purchasing privileges of farmers during 1996–98. Foreigners were allowed to buy land from 1993 onwards (on the control of land ownership, see Ripatti 1996).

The comprehensive rationing of the timber trade through a stumpage price agreement system was strengthened from the late 1970s as a part of macro-economic income contracting (Ollongvist 1998).⁴ The EU and the Finnish competition authorities considered this institution illegal in 1996 and it was discontinued as such. However, annual discussions regarding stumpage price expectations between the individual forest industries (Stora Enso and UPM) and the representatives of forest owners were allowed, but the Finnish competition authority eventually banned this system, too, in 1999. The control of the foreign trade of roundwood was an essential part of the timber price agreement system and it restricted effectively timber imports into Finland. This institution supported preservation of domestic timber prices over those of international prices. Since 1996, roundwood imports started to grow rapidly and is currently about 15 million cubic meter annually. This is 17 per cent of the total volume of roundwood used by forest industry (Finnish Statistical ... 2001).

The deregulation made only a minor impression on the forest land market, but made a fundamental one on the roundwood market. The latter changes are significant with respect to the implementation of Finland's National Forest Programme 2010. The growth of the volume of imported timber is based on competitive pricing and it challenges the targets for the investments on timber production and the use of domestic roundwood determined in the programme.

4 Status of a national forest programme

There is a long tradition of national forest policy programmes in Finland (Metz 1993, Ollongvist 1998).⁵ In fact, it can be said that the continuum of national programmes since 1960's have become an institution in itself. Finland's National Forest Program 2010 (1999) is clearly different from its predecessors. Unlike the previous programmes, it is the first one with a governmental initiative as well as commitment and formal acceptance of key ministries and parties in the Government.⁶ However, the political opposition was formally excluded from the policy process because the programme proposal was not subjected to parliamentary proceedings.

The Government's commitment to the preparation and implementation of the programme enlarged the political consensus over the national forest programme in Finland. The formal authorisation of the programme has made it a binding forest policy framework in the Governmental policy arena. The commitment of the key ministries, the Ministry of Finance in particular, and the parties in power, has provided better opportunities to incorporate expenses, e.g. indirect and direct public subsidies, into the State budget in order to enforce the programme.

The environmental impact assessment of the national forest programme was a precondition for its eventual approval and implementation. The assessment was quite critical but did not caused any changes (Environmental impact... 1999).⁷ One reason for the lack of changes was the extremely tight timetable because the programme had to be approved during the Government period. The Government's commitment to the preparation of a national forest programme is, without doubt, a supporting factor but, on the other hand, tying its approval to the Government period can be seen a weakness, given that the schedule is too tight.

5 From neo-corporatist dominance towards participation and inter-sectoral co-ordination.

5.1 Environmental Programme for Forestry introduced participation and inter-sectoral co-ordination

The adoption of a participatory approach to forest policy planning has been a challenging task of national forest programme process in Finland. The initiative had its origins in the Rio conference. Ministerial congresses and IPF/IFF-processes also increased pressures for the adoption of a new policy mode. The difficulties in implementing a participatory approach were due to the long and strict dominance of the neo-corporatist forest policy agenda: the key policy targets and institutions were considered to be under threat. In addition, the inter-sectoral planning in the preparation of forest policy had traditionally been carried out symbolically and without systematic collaboration with other sectors' policy makers.

The first notable step in adopting participatory elements and increasing also inter-sectoral co-ordination in forest policy took place during the working process of the Environmental Programme for Forestry (1994). The strategy for sustainable forest management in Finland up to 2005 was outlined in this process. Initially there was considerable mistrust between the Ministry of Agriculture and Forestry and the Ministry of the Environment because of the risk of a redistribution of their administrative power: the Ministry of Agriculture and Forestry has the responsible of the public administration of commercial forests but the Ministry of the Environment administrates conservation areas. In the midst of the preparation, the Ministry of the Environment began the preparation of its own strategy for the preservation of the biodiversity of the forest ecosystem (Strategy for ... 1994). In spite of this, the joint work group of both ministries eventually succeeded. This was the first joint venture of these two ministries in forest policy arena, and the Environmental Programme for Forestry was ratified jointly by the Ministry of Agriculture and Forestry and the Ministry of the Environment.

Beside the two ministries, representatives of various organisations and bodies including a non-governmental environmental organisation, were invited to participate. In order to weaken corporatist power, executive managers were not invited into the work group. Later on, a more broad-based working group was appointed by the Ministry of Agriculture and Forestry to monitor the implementation of the programme. The monitoring group reported annually on the stage of implementation during the period 1995–98 (Environmental... 1999). The outcome – Environmental Programme for Forestry – became the basic statement on Finnish forest policy during the 1990s, and it also included an initiative for preparing a national forest programme. It was also adopted as an environmental guideline on forestry issues for inclusion into a comprehensive national environmental policy programme up to 2005 that was prepared by the Ministry of the Environment in 1995 (National Environmental ... 1995).

Participation and inter sectoral co-ordination was further exercised in a simultaneous reform of the Nature Conservation Act and the Forest Act in 1994–

96. The same procedure was also followed in the development of the standards for the Finnish forest certification system in 1996–97, as well as in the process of the national forest programme from the beginning of 1998. Participation and inter-sectoral co-ordination were adopted also on regional level when formulating and implementing the regional forest programmes since 1997.

Governmental and non-governmental environmental organisations were jointly involved in the forest policy planning process for the first time in producing the Environmental Programme for Forestry. The participants achieved consensus over the principles of ecological sustainability in the management of commercial forests. The involvement of key environmental organisations into the forest policy arena was seen to be encouraging and turned out to be workable solution. In spite of clear progress made with the participatory approach during the 1990's, no transparent plan for participation has been developed. In other words, who can participate and under what conditions, has not been defined by procedures and rules for the actors involved. In the national forest programme -process, however, there was a simple participation plan. In an ideal situation, stakeholders are afforded a possibility to participate in the shaping of a participatory plan and procedures but, so far, this has not been the case in Finland.

5.2 The modes of participation and inter-sectoral co-ordination in the NFP-process

National consensus and the Governmental acceptance were set as key targets for the national forest programme. In order to ensure Governmental and political commitment, a group consisting of six key ministers (*Ministerial Group*) was established to co-ordinate the preparation of the NFP. Good experiences concerning the enlargement of the participatory network in the preparation and implementation of the Environmental Programme for Forestry encouraged the enlargement of the policy network also in the NFP-process. Therefore, a *Steering Group* was nominated consisting of 14 representatives from the key ministries and main interest groups, and an independent secretary general. *Three work groups* were set up for the practical work in which the traditional corporatist network accompanied with representatives of environmental organisations were given a dominant role, but only a minor one was left for forest research representatives. Three secretaries, representing various stakeholders, were appointed to each work group. An *Executive Committee*, consisting of all chairpersons, 1 to 2 secretaries of the work groups and the secretary general (in all 10 persons), was set up to make preliminary proposals for the steering group meetings. In addition, 16 *permanent experts* representing different interest groups worked within work groups, and 38 experts were also invited to meetings.

The traditional top-down procedure was complemented by Internet and Public Forums. All the versions of the programme were put on the web site at the very same time as they were handed out to the members in NFP-preparation bodies. In addition, the Internet link provided access to the minutes of the work groups, statements and a column for discussion. The Public Forums were arranged twice in the each district of regional Forestry Centres during the programme preparation. In addition, the programme drafts were presented in several *ad hoc* Public Forums.

The mode of open access participation through the Internet discussion forum was a new element in Finnish forest policy formulation. However, it had only a minor influence on the programme preparation (Reunala et al 1999). Participation through the Internet was ineffective because of the background papers of the three work groups were not available, and only the material over which consensus was achieved were presented. The outcomes of the Public Forums have not been reported afterwards. The district organisations of the Finnish Association for Nature Conservation, however, announced their disappointment concerning the lack of empowerment of the Public Forums.

In order to secure the implementation of the national forest programme, the Forest Council was appointed to manage and coordinate its implementation. The nineteen members of the Council consist of representatives of four ministries, trade unions in the forest sector, the forest industry and forest owner associations, environmental organisations, the Scouts, and women's advisory organisation for development of rural areas. Participation in the Council is wider than ever before in the history of Finnish forest policy. However, the members of the neo-corporatist forest policy network still have dominant position in the Council. The Council can establish subordinate *ad hoc* work groups, and it has an Executive Committee with nine members accompanied by chairpersons of the *ad hoc* work groups. Experts can be invited to committees when necessary. The Council makes an annual report on implementation of the national forest programme.

6 Decentralised power – regional base of the NFP

The Forest Act of 1996 established a base for the decentralisation of power via regional forest programmes. Each regional Forest Centre (13) is commuted to draw up a forest programme in co-operation with all forestry and other relevant stakeholders in their region. The programme must include the targets for promoting sustainable forest management, targets for publicly financed silvicultural and environmental measures, and overall targets for the development of forestry. The programme is subject to review at least every fifth year. The Regional Forest Programmes were compiled for the first time in the beginning of 1998, and they were utilised as background material when formulating the national forest programme.

The regional forest programmes were revised for the first time after the national forest programme was compiled. A project group set by the Ministry of Agriculture and Forestry supported and co-ordinated the revision. The revised programmes were completed early in 2001, and a Regional Forest Council was set up in each Forest Centre to support the implementation and monitoring of the regional forest programme. The broad-based Council aims to act as a regional collaborative forum and as a link between the national and the regional forest programmes. The Ministry of Agriculture and Forestry appointed members of the Councils following proposals made by the Forest Centres.

With these arrangements, regional stakeholders were involved in the implementation of the national forest programme. The forest policy targets at the national level were based partly on the targets determined at the provincial level, although the national forest programme sets the limits for the implementation of

regional forest programmes (e.g. public subsidies). This interaction and feedback system has been successful because there are no fundamental inconsistencies and conflicts in forest policy targets between different regions in Finland. The enlargement of regional sovereignty in forest policy issues was a supporting institutional change with respect to the national forest programme -process.

7 Conflict resolution schemes for forestry issues

Weak conflict resolution and poor conflict management has been preserved as a feature of Finnish forest policy. Environmental conflicts (in chronological order: clear felling, drainage of mires, use of chemicals, old-growth forests, endangered species, conservation) have been centre stage in forestry, and authoritarian solutions dominated their management up to the early 1990s (Hellström and Reunala 1995). Later, the conflicts were better understood, and seen as an important force behind social development. Their constructive potential has also been recognised. However, no reconciliation mechanism exists, nor have any negotiation procedures been developed for forestry conflicts.

The first change in the resolution of the conflicts in forest policy preparation can be identified with respect to the Environmental Programme for Forestry in 1993–94. The new feature concerned the participation of a wide range of interest groups, including one non-governmental environmental organisation, as well as the co-operation between forestry and environmental authorities. Initially, all the failures in forestry were listed and discussed in order to make the process as transparent as possible. Controversial issues that arose during the programme formulation phase were thoroughly discussed by the chair of the committee and key persons individually before a proposal was introduced to the committee. The feasibility of the programme was further secured by a broad-based monitoring work group during the period 1995–98⁸.

Another new step was taken in conflict resolution when the Forest Forum for Decision-Makers was established in 1996. It is a top-level discussion forum for forest policy issues for the identification and evaluation of conflicts. The biannual forum, consists of a one-day indoor seminar and a three-day field excursion, for senior decision-makers in various sector of society – politicians, executives, journalists and civil servants – in order to achieve interaction and dialogue. The structure for the forum was formulated in 1995 by an advisory group appointed by the Prime Minister, and its management was entrusted to the Finnish Forest Association. The forum has been a success story: an invitation to the forum is valued, and the forum has undoubtedly advanced the mutual understanding of forestry and environmental issues.

Only a simple plan for conflict resolution was outlined in the preparation of the national forest programme. The chairman in each work group was committed to documenting the different values and viewpoints, and also to provide time for discussing these issues in the work group meetings. When consensus was unattainable, the issues in question were transferred first to the Executive Committee, then to the Steering Group and, finally, to the Ministerial Group. Forest conservation was a controversial issue throughout the program preparation, and two discussion seminars on forest conservation and ecological sustainability

were arranged. No conflict management plan is available that could be applied during the implementation of the national forest programme.

8 Institutional measures adopted to promote ecologically sustainable forestry

The revised management patterns in commercial forests were among the major steps in the forest policy activities towards sustainable forest management. The schemes for achieving ecologically sustainable forest management are based mainly on the Environmental Programme for Forestry and its follow-up reports between 1995 and 1998. Finland's National Forest Programme 2010 did not introduce any new measures for biodiversity conservation over those in the Environmental Programme for Forestry. The core of the NFP lies in the consensus to implement those measures. Since the mid 1990s, forest management recommendations for public and private commercial forests have been renewed in the spirit of the Environmental Programme for Forestry, and include instructions for the maintenance and promotion of biological diversity. The maintenance of forest biodiversity was a key principle in the 1996 Forest Act. It defines seven valuable habitats whose typical features must be preserved in everyday forest management. At the same time, the Act for Financing of Sustainable Forestry was also reformed. It provided financial instruments for securing the management of forest ecosystems and the protection of forest biodiversity, however, the focus remains timber production.

A countrywide inventory of the valuable habitats listed in the Forest Act will be completed in 2003. Since 1995, the maintenance of biodiversity in commercial felling tracts has been monitored annually by a sample-based system developed by the Forestry Development Centre Tapio. The Forest Centres carry out the fieldwork in private forests, and the Forest and Park Service in the State forests. According to the monitoring results, the felling of timber has been improved during the period 1996–99 so that the characteristics of valuable habitats are increasingly preserved (Hänninen 2001).

The semi-public structure of the extension services for the private forestry was preserved in the organisational reform during the mid of 1990s. The Act on Forest Centres and Forestry Development Centre (1995) preserved the authority of the regional forest centres to conduct forest management planning, to administer forest improvement work and to allocate public funds for non-industrial private forest management, as well as to enforce the Forest Act. The supervision of the Forest Act was administratively separated from the other business.

The local Forest Management Associations play a central role in the implementation of sustainable forest management. They are voluntary consortia of forest owners that have been granted the right to levy forest management fees, like taxes, upon all the forest owners in order to partly finance their activities. Although they have juridical status of private bodies, the right to levy tax-like fees has involved them as a party to the management of forest policy objectives. The 1998 Act on Forest Management Associations redefined the duties of the Forest Management Associations. According to the Act, the associations must provide extension services in forest management and timber trade. However, the funds

levied via the compulsory forest management fee cannot be used in timber trade issues. The Forest Centres supervise the use of the funds. In practice, the focus of their business has strongly shifted to timber trade issues at the cost of promoting silvicultural management in the 1990s. The Central Union of Agricultural Producers and Forest Owners, the umbrella organisation of the Forest Management Associations, has encouraged them to prioritise timber trade issues and other economic aspects in forest management. Concerning the adoption of sustainable forest management practices and measures, forest industry has been more adaptable and willing than the forest owners' organisation.⁹

Forest and conservation research institutes have responded to the need to produce comprehensive information on forest biology, forest biodiversity and to monitor its development and the environmental impacts of silviculture. The Finnish Environment Institute has developed and continuously maintains a register of endangered species in Finland (Rassi et al 2001), and the Finnish Forest Research Institute has included measures for biodiversity in the National Forest Inventory. Various research organisations have launched extensive multidisciplinary research programmes on aspects of biodiversity e.g.:

- Biological Diversity (LUMO, -1996), the Finnish Environment Institute
- Forest Biodiversity (1995–2000), Finnish Forest Research Institute
- Finnish Biodiversity (FIBRE, 1997-2002), the Academy of Finland.

Transparency of forest policy was set a target in the Helsinki process. For that purpose, work for the preparation of national criteria and indicators of sustainable forest management in Finland was launched in 1994. The first report was published in 1997 (Eeronheimo et al 1997). In the following year, the Ministry of Agriculture and Forestry appointed a new working group to undertake the further development of the criteria and indicators, and the outcome of the second revision was published in 2000 (Mikkilä et al. 2000). The process has reinforced the national consensus on the content of sustainable forest management and the indicators with which sustainability can be measured and monitored. The monitoring process has become a permanent institution in Finland.

The development of a system to prove the quality of forest management and timber procurement was started in parallel with the policy revision in the mid-1990s. As a national forest certification system, a broad-based work group defined 37 criteria to be applied to forests in the areas of the Forest Centres or the Forest Management Associations, and 23 criteria applied to single private forest holdings (Development of Forest ... 1997). The Finnish Forest Certification System, FFCS, launched in 1999, is based on regional group certification, and it was approved by the Pan-European Forest Certification system, PEFC, in spring 2000. Today, 95 per cent of Finnish forests are certified under FFCS, and several PEFC certificates have been issued to forest industry companies and forestry organisations (Mikkilä et al 2000).

The above measures are related mainly to the management of commercial forests. The Environmental Programme for Forestry also emphasized the implementation of the conservation programmes confirmed by the Government early in the 1990's, and to supplement these programmes with the protection of old-growth forests on private lands and the protection of endangered species by the year 2000. The need to increase forest conservation in Southern Finland has been stressed. To realize

all the conservation needs in such a short time is impossible, however, because of the missing financing. In 1995, a committee was appointed to prepare a target programme for forest conservation and a related financing and employment programme up to 2010 (Committee report on... 1996). In 1996, the Government's council of ministers for economic policy approved the financing programme for forest conservation for years the 1996–2007. The proposal for the enlargement of forest conservation was mainly based on public purchases of forested land, but new financing instruments were not proposed. However, state-owned commercial forests were seen a medium of exchange to expand conservation in private forests.

During the preparation of the NFP, the question of the enlargement of forest conservation areas in Southern Finland was again included in the agenda, but the handling of that controversial issue was transferred to the near future. According to the NFP, an *ad hoc* work group, consisting mainly of scientists, evaluated the needs and scale of the forest conservation from the ecological point of view. Thereafter, an other broad-based work group appointed by the Government, began to evaluate social and economic possibilities and measures for implementation of the proposal of the previous work group. The work was extremely difficult and become a kind of battlefield of lobbyists.

The Forest and Park Service manages conservation forests and protected areas, i.e. national parks and nature reserves, but it also administrates the state-owned commercial forest. The contradiction between business and conservation objectives is real because the state-owned commercial forests are politically more acceptable as potential areas for further conservation than the private forests. They can also be exchanged for private forest land of high conservation value. Unfortunately, state-owned forests are mainly located in northern Finland but the need for additional areas for forest conservation is greatest in southern Finland where forests are mainly in private ownership.

9 Conclusion

Four institutional factors can be considered the primary ones that support or impede the process of the Finnish National Forest Programme. First, the political parties in the coalition Government achieved the consensus over the agenda and contents of the national forest programme during the preparation. This consensus strongly supported the implementation of the programme and has made it possible to preserve and even increase public subsidies for timber production, despite an overall aim to reduce public subsidies to private economic activities. Inter-sectoral co-ordination had existed mainly symbolically before the NFP-process. It has gradually expanded and became substantial during the implementation stage of the programme. National consensus that has been achieved is a good start for continued and substantial inter-sectoral co-ordination of forest policy planning.

Secondly, the strengthening of regional sovereignty with respect to forest policy issues supported the preparation and implementation of the national forest programme. Two institutional changes were crucial: first, the organisational reform of forestry administration strengthened the status of regional forest centres and, secondly, the regional forest programmes became compulsory in the new Forest Act. The forest policy targets at the national level are currently based partly

on the targets determined at the provincial level. On the other hand, the regional forest programmes were synchronized with the NFP after it was officially approved. The Regional Forest Councils were set up in each forest centres to support the implementation and monitoring of regional forest programmes. The close link between the national and regional forest programmes has strengthened the commitment of provincial actors to the implementation of the national forest programme.

Thirdly, the long corporatist tradition and strong dominance of the forest stakeholders' network dominated Finnish forest policy planning up to the end of 1980s. This tradition impeded the enlargement of participation in forest policy planning. Efforts to enlarge network of stakeholders outside of forest community have been successful after the breakthrough during the preparation of the Environmental Programme for Forestry in 1994. While free access to participate in the preparation of the NFP was provided through the Internet and Public Forums, it had only a minor effect on the content of the NFP. Nonetheless, each of these efforts can be seen to have supported the development of a substantive NFP with respect to participation. The evaluation of the NFP that will be accomplished during the summer 2002, can be considered as a reaction to the transparency target adopted in the beginning of the NFP-process.

Fourthly, authoritarian solutions have dominated the resolution of forestry conflicts, especially concerning environmental issues. On the other hand, environmentalists stubbornly have preserved in their practically and economically unrealistic targets. Together, these have caused mistrust between the conflicting parties that has impeded the development of a rational system for handling forestry conflicts. In addition, the lack of systematic conflict resolution scheme has maintained the conflict potentials over those NFP's targets that are considered necessary for ecological sustainability. The lack of a conflict resolution scheme may turn out to be a serious threat to the successful implementation of the Finnish National Forest Programme.

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Endnotes

1 Following the UNCED Conference in Rio de Janeiro 1992, Finland took an active role towards developing a common forest policy at the international and European levels. The second Ministerial Conference on the Protection of Forests in Europe was held in Helsinki in 1993, and Finland has actively supported the work in the UNCED's bodies IPF and IFF.

2 The members of the Finnish Forest Association represent the forest related organizations in Finland, e.g. forest industries, private forest owners, the state, research and education organizations and NGO's. Its primary task is to provide information on Finnish forests, forestry and the forest industry both in Finland and abroad.

3 Greenpeace closed down its office in Finland in November 1997.

4 The basis for the stumpage price agreement system was established in the 1960's. Initially, price recommendations for pulpwood were made on a national basis but for sawlogs on regional basis because of the large number of sawmills. During the 1970's, the scope of price recommendations increased and they were applied nationwide. Since 1984, the recommendations also covered traded timber quantities. Despite the agreements, actual timber prices were determined by negotiations between a forest owner and a wood buyer (on the history and the meaning of the stumpage price agreement system, see Ollonqvist 1998, Toppinen 1998).

5 The first forest programme (HKLN-programme) was launched in 1961. This was followed by Teho-programmes (1962 and 1964), the Mera programmes (1964, 1966 and 1970) and the Forest 2000 Programme (1985) with its revised version (1992). In 1970's, the Consultative Committee of Forestry made annually timber production programmes for five-year period (Metz 1993, Ollonqvist 1998).

6 In the late of 1980's, however, the Government referred to the Forest 2000 Programme (1985) as its strategy in forest policy issues (Palo 1993).

7 An expert group of scientists made an environmental impact assessment of the national forest programme. The poor economic calculations behind the suggested public subsidies and shortages of economic analysis were criticised in particular. The report considered that the programme was too oriented towards timber production and utilisation, and that the targets for increasing fellings and forest ditching were in conflict with the targets of water protection programme (Hilden et al 1999).

8 The number of representatives of non-governmental environmental organisations was increased in the follow-up working group.

9 Forest companies began to revise their forest management guidelines in 1992-93 but the forest owners' organisation did not publish its recommendation until 1995. According to follow-up reports of the Environmental Programme for Forestry in Finland, forest companies also started to train their employees earlier and more extensively than Forest Management Associations.